IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appl. No.	:	10/607,227	Confirmation No. 5896
Applicant	:	William E. Spindler	
Filed	:	June 26, 2003	
Title	:	CLEANING COMPOUND FOR CLEANING SURFACES IN A FOOD PROCESSING ENVIRONMENT	
TC/A.U.	:	1746	
Examiner	:	Bibi Sharidan Carrillo	
Atty. Docket No.:		NSC0001	
Customer No.	:	0832	

APPEAL BRIEF

Mail Stop Appeal Brief-Patents
Assistant Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This appeal is taken from the Examiner's decision dated December 19, 2007 in the above-identified patent application finally rejecting Claims 37-80, by way of a Notice of Appeal filed on even date herewith.

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I. REAL PARTY IN INTEREST

The real party in interest is William E. Spindler of Fort Wayne, IN, the sole named inventor in the present application.

II. RELATED APPEALS AND INTERFERENCES

Neither the Appellant nor the Appellant's representatives know of any other appeals, interferences or judicial proceedings which are related to, will directly affect, will be directly affected by, or have a bearing on, the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Pending:	Claims 37-80.
Canceled:	Claims 1-36.
Withdrawn:	None.
Allowed:	None.
Objected to:	None.
Rejected:	Claims 37-80.
On Appeal:	**Claims 37-80.**

IV. STATUS OF AMENDMENTS

None of the claims have been amended since the final Office Action dated December 19, 2007.

Claims 37-80 on appeal are set forth in the **CLAIMS APPENDIX**.

V. SUMMARY OF CLAIMED SUBJECT MATTER

With respect to **independent Claim 37**, the invention relates to a method of cleaning and disinfecting a surface or an item of equipment, comprising the steps of:

providing a cleaning kit comprising:

a first container consisting essentially of a peroxide; and

a second container consisting essentially of an alkaline component; and

applying the peroxide and the alkaline components of the first and second containers to at least one of the surface and the item of equipment to clean and disinfect the surface or item of equipment. (Specification, page 3, line 15 through page 7, line 2).

With respect to **independent Claim 57**, the invention relates to a method of cleaning and disinfecting a surface or an item of equipment, comprising the steps of:

providing a cleaning composition in dry form, the cleaning composition consisting essentially of a peroxide and an alkaline component; and

applying the cleaning composition in dry form to at least one of the surface and the item of equipment to clean and disinfect the surface or item of equipment. (Specification, page 3, line 15 through page 7, line 2).

With respect to **independent Claim 71**, the invention relates to a method of cleaning and disinfecting a surface or an item of equipment, comprising the steps of:

providing a cleaning composition in dry form, the cleaning composition consisting essentially of a peroxide; and

applying the cleaning composition in dry form to at least one of the surface and the item of equipment to clean and disinfect the surface or item of equipment. (Specification, page 3, line 15 through page 7, line 2).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. 35 U.S.C. §112 rejections.

1. The rejection of Claims 37-80 under 35 U.S.C. §112, first paragraph.

2. The rejection of Claims 47-52, 56, 58, 62-67, 70, and 73-79 under 35 U.S.C. §112, second paragraph.

B. Prior art rejections.

1. The rejection of Claims 37-51, 53-66, 68-77 and 79 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,739,327 to Arbogast et al. ("Arbogast et al. '327").

2. The rejection of Claims 37-47 and 53-55 as being anticipated by U.S. Patent No. 5,743,514 to Rees ("Rees '514").

3. The rejection of Claims 37-51 and 53-56 as being anticipated by U.S. Patent No. 6,391,840 to Thompson et al. ("Thompson et al. '840").

4. The rejection of Claims 52, 67, 78, and 80 under 35 U.S.C. §103(a) as being obvious in view of Arbogast et al. '327.

5. The rejection of Claim 52 as being obvious in view of Thompson et al. '840.

VII. ARGUMENT

A. 35 U.S.C. §112 Rejections.

1. Claims 37-80 are enabled under 35 U.S.C. §112, first paragraph.

The Examiner rejected Claims 37-80 under 35 U.S.C. §112, first paragraph, stating that "...the specification, while being enabled for cleaning a food processing environment, does not reasonably provide enablement for cleaning a surface or an item of equipment". (Office Action dated December 19, 2007, page 2).

Appellant is unclear as to the Examiner's reasoning. In stating that the specification is enabled for cleaning "a food processing environment" but not "a surface" or "item of equipment", the Examiner would appear to reason that the claims are enabled for cleaning surfaces and items of equipment so long as they are in a food processing environment, but that the claims are not enabled for cleaning surfaces and items of equipment that are not in a food processing environment. Further, the Examiner states that "[i]t does not appear to be feasible that any item or surface would function in the present invention". Id.

The test for enablement is whether one of ordinary skill in the art is able to make and use the invention without undue experimentation. In re Wands, 858 F.2d 731, 737 (Fed. Cir. 1988); MPEP § 2164. With respect to the present case, applying the claimed cleaning composition to various surfaces and items of equipment to determine the effectiveness of the composition would be straightforward and simple for one of ordinary skill in the art, and would not require specialized equipment or knowledge.

Appellant submits that one of ordinary skill in the art would know from Appellant's specification that a "food processing environment" is an exemplary application of the claimed cleaning compositions. It is well known that cleaning compositions are generally useful on many different surfaces, for example, U.S. Patent No. 5,739,327 to Arbogast et al. ("Arbogast et al. '327"), applied by the Examiner, lists a number of different applications for its cleaning compositions at col. 11, lines 24-62, including laundry products, hard surface cleaners, spa additives, and cleaners to remove stains on outdoor concrete and stucco.

Appellant notes the present application as filed at page 3, lines 19-23, which states that the present cleaning composition may be applied to "surfaces in food processing facilities, such as walls, floors and equipment." Disclosure of the application of the present cleaning composition to surfaces and/or equipment may also be found in the specification as filed at page 1, line 7, at page 2, line 23, and at page 6, lines 6-8 and 17-19, for example. In the Examples on page 6 of the present application, a dry premix may be applied generally to "a surface to be cleaned" (lines 11 and 12) or may be diluted with water "and applied to a surface to be cleaned" (lines 18-20).

Appellant respectfully submits that the claimed cleaning compositions would indeed clean any surface or item of equipment, and are not restricted in application to particular types of surfaces or to particular items of equipment. In particular, the present cleaning composition cleans and disinfects surfaces or items of equipment on contact, regardless of the type of surface or item of equipment, and therefore no undue experimentation would be needed by one of ordinary skill in the art to figure out what types of surfaces or items of equipment may be cleaned with the claimed cleaning compositions.

2. Claims 47-52, 56, 58, 62-67, 70, and 73-79 are not indefinite under 35 U.S.C. §112, second paragraph.

The Examiner rejected Claims 47-52, 56, 58, 62-67, 70, and 73-79 under 35 U.S.C. §112, second paragraph, asserting that certain dependent claims are indefinite because they recite open-ended language but are dependent upon independent claims which recite closed language.

The transitional phrase "consisting essentially of" that is used in the independent claims of the present application is not closed language but rather is partially open-ended language, occupying a middle ground between "comprising" (open) and "consisting of" (closed). *See generally* MPEP §2111.03. In particular, "recital of 'essentially' along with 'consisting of' [is regarded] as rendering the claim open only for the inclusion of unspecified ingredients which do not materially affect the basic and novel characteristics of the composition." Ex parte Hoffman, 12 U.S.P.Q.2d 1061, 1063 (B.P.A.I. 1989).

In the present application, the additional substances recited in the dependent claims, such as chelants, coupling agents, dyes, and surfactants (*See* Claim 47) are well known in the art as optional chemical adjuncts that, while potentially affecting the physical properties of the claimed cleaning composition, would not affect the active chemistry of the peroxide and the alkaline components of the independent claims.

Arbogast et al. '327, for example, discloses a number of chemical adjuncts at col. 9, line 63 through col. 11, line 20 thereof, such as dyes, chelants, etc., that may optionally be included in the disclosed cleaning compositions but which would not affect the operation of the nitrile bleach activators that are disclosed as the novel element. U.S. Patent No. 6,391,840 to Thompson et al. ("Thompson et al. '840"), also applied by the Examiner, lists numerous optional chemical additives at col. 8, line 63 through col. 12, line 6, such as thickeners, surfactants, etc.

The chemical adjuncts called for in the dependent claims rejected by the Examiner do not recite substances that would affect the active chemistry of the peroxide and the alkaline components called for in the independent claims and therefore, are not excluded by the transitional phrase "consisting essentially of" in the independent claims.

For the foregoing reasons, Appellant submits that Claims 47-52, 56, 58, 62-67, 70, and 73-79 are not indefinite under 35 U.S.C. §112, second paragraph.

B. Art Rejections.

Responsive to the art rejections set forth by the Examiner, Appellant has submitted the Declaration of the inventor and Appellant in the present application, Mr. William E. Spindler, under 35 U.S.C. §1.132 ("the Spindler Declaration"). The Spindler Declaration with exhibits was entered by the Examiner at paragraph 17 of the final Office Action dated December 19, 2007, as part of Appellant's submission dated October 29, 2007.

The Spindler Declaration explains how certain chemical elements that are disclosed in the references applied by the Examiner are properly excluded the by phrase "consisting essentially of" in independent Claims 37, 57, and 71, because the inclusion of such elements would "materially affect the basic and novel characteristics of the composition." Ex parte Hoffman, 12 U.S.P.Q.2d at 1063.

In particular, the chemical elements discussed in the Spindler Declaration that are disclosed in the references applied by the Examiner are not well known chemical adjuncts such as chelants, coupling agents, dyes, and surfactants, etc., of the type discussed above that would not affect the basic and novel chemistry of the claimed invention and therefore are encompassed by the "consisting essentially of" language of the claims.

Rather, in accordance with test of Ex parte Hoffman, the chemical elements discussed in the Spindler Declaration that are disclosed in the references applied by the Examiner are "active" chemical species that, if present, would react with the claimed peroxide and/or alkaline components and would affect the basic and novel chemistry of the peroxide and/or the alkaline components.

In the "Response to Arguments" section in paragraph 16 of the Office Action dated December 19, 2007, the Examiner addresses the Spindler Declaration in the context of the statutory bar of 35 U.S.C. §102(b), secondary considerations of nonobviousness, and overcoming obviousness in general.

To the contrary, Appellants have not submitted the Spindler Declaration in connection with any of the foregoing considerations, but rather to prove that certain chemical elements that are disclosed in the references applied by the Examiner, discussed below, are properly excluded the by transitional phrase "consisting essentially of" in independent Claims 37, 57, and 71. As discussed below, Appellant has carried the burden of proof on this issue.

1. Claims 37-51, 53-66, 68-77 and 79 are not anticipated by U.S. Patent No. 5,739,327 to Arbogast et al.

The Examiner rejected Claims 37-51, 53-66, 68-77 and 79 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,739,327 to Arbogast et al. ("Arbogast et al. '327").

As set forth in the Spindler Declaration, Arbogast et al. '327 discloses bleaching compositions which include (1) an active oxygen source, such as a peroxide of the type listed at col. 6, lines 45-52, and (2) a nitrile activator of the type set forth at col. 3, line 56 through col. 5, line 40. As discussed at col. 5, lines 30-40, when the peroxide and the nitrile activator are combined in alkaline conditions, they react to form peroxyimidic intermediates. The peroxyimidic intermediates in turn form peroxyimidic acid, which is the bleaching species. As

discussed at col. 9, lines 17-42, in one embodiment, a dual delivery system may be provided in which one container includes the nitrile activator, a surfactant, the active oxygen source, and an acidic buffer, and another container includes an alkaline solution.

Amended independent Claim 37 calls for a method of cleaning and disinfecting a surface or an item of equipment, including the steps of providing a cleaning kit including a first container consisting essentially of a peroxide, and a second container consisting essentially of an alkaline component; and applying the peroxide and the alkaline components of the first and second containers to at least one of the surface and the item of equipment to clean and disinfect the surface or item of equipment.

Amended independent Claim 57 calls for a method of cleaning and disinfecting a surface or an item of equipment, including the step of providing a cleaning composition in dry form, consisting essentially of a peroxide and an alkaline component, and amended independent Claim 71 calls for a method of cleaning and disinfecting a surface or an item of equipment, including the step of providing a cleaning composition in dry form, the cleaning composition consisting essentially of a peroxide.

Arbogast et al. '327 fails to disclose a cleaning composition consisting essentially of a peroxide and an alkaline component, as called for in Claims 37 and 57, or a cleaning composition consisting essentially of a peroxide, as called for in Claim 71. In particular, the nitrile activator of the bleaching compositions disclosed in Arbogast et al. '327 is properly excluded by the transitional phrases "consisting essentially of" in independent Claims 37, 57, and 71.

As discussed in the Spindler Declaration, the nitrile activators of the bleaching compositions of Arbogast et al. '327, which are also known in the art as "bleaching activators", react with the active oxygen source in alkaline conditions to form peroxyimidic intermediates which in turn form peroxyimidic acid. The peroxyimidic acid, a peracid, is a potent oxidant and is the actual bleaching species. Attached to the Spindler Declaration as **Exhibits 1 and 2** are, respectively, a web page from *www.scienceinthebox.com* and Lim, S-H et al., *Performance of a new cationic bleach activator on a hydrogen peroxide bleaching system*, (2004), which each discuss the role of bleach activators in reacting with peroxides in alkaline conditions to generate peracids, potent oxidants that are the actual bleaching species.

As set forth in the Spindler Declaration, in contrast to the bleaching compositions of

Arbogast et al. '327, which include a nitrile activator that reacts with an active oxygen source in alkaline conditions to generate a peracid that is the bleaching species, the cleaning compositions of independent Claims 37, 57, and 71 lack nitrile or other "bleaching activators", but rather clean and disinfect based on the release of oxygen by the peroxide.

Thus, Arbogast et al. '327 fails to disclose cleaning compositions consisting essentially of a peroxide and an alkaline component, as called for in Claims 37 and 57, or a cleaning composition consisting essentially of a peroxide, as called for in Claim 71, and one or ordinary skill in the art, in considering the overall teachings of Arbogast et al. '327 with no knowledge of the presently claimed invention, would have no incentive or motivation to modify the cleaning compositions of Arbogast et al. '327 to form a cleaning composition which does not include the nitrile activator disclosed in Arbogast et al. '327.

Also, the peroxide and detergent compositions used for comparative purposes in Examples 4 and 5 of Arbogast et al. '327 (*See* Tables 6 and 7, col. 17, line 55 and col. 18, line 40, respectively) are single phase aqueous solutions of peroxide and detergent, and therefore are not a *method* of cleaning and disinfecting a surface or an item of equipment, including the steps of providing a cleaning kit in including a first container consisting essentially of a peroxide, and a second container consisting essentially of an alkaline component; and applying the peroxide and the alkaline components of the first and second containers to at least one of the surface and the item of equipment to clean and disinfect the surface or item of equipment, as called for in Claim 37, or a cleaning composition provided in dry form, as called for in Claims 57 and 71.

Thus, Appellant respectfully submits that independent Claims 37, 57, and 71, as well as the claims which depend therefrom, are not anticipated by, nor obvious in view of, Arbogast et al. '327.

2. Claims 37-47 and 53-55 are not anticipated by U.S. Patent No. 5,743,514 to Rees.

The Examiner rejected Claims 37-47 and 53-55 as being anticipated by U.S. Patent No. 5,743,514 to Rees ("Rees '514").

As set forth in the Spindler Declaration, Rees '514 discloses a bleaching solution including (1) a peroxide, such as hydrogen peroxide, (2) an alkaline agent, such as an alkaline metal carbonate, and (3) a lactone of the type set forth at col. 4, line 41 through col. 5, line 6.

The disclosure states that "the lactones employed in the inventive solution enhance the bleaching rate of hydrogen peroxide by formation of a peroxyacid of the ring opened lactone in a neutral to alkaline environment" which enhances "the bleaching rate of the inventive solution compared to a similar alkaline solution of hydrogen peroxide without the lactone". Notably, as discussed at col. 5, lines 23-37, the lactone and the peroxide are both more stable under acidic conditions such that the bleaching solution may be provided in two vessels, in which a first vessel includes the lactone and the peroxide, and a second vessel includes at least one alkaline agent (col. 6, lines 11-29).

Rees '514 fails to disclose a method of cleaning and disinfecting a surface or an item of equipment, including the steps of providing a cleaning kit including a first container consisting essentially of a peroxide and a second container consisting essentially of an alkaline component, and applying the peroxide and alkaline component of the first and second containers to at least one surface or the item of equipment to clean and disinfect the surface or item of equipment, as called for in independent Claim 37. In particular, the lactones of the bleaching solutions of Rees '514 are properly excluded by the translational phrase "consisting essentially of" in independent Claim 37.

As discussed above, the lactone in the bleaching solutions of Rees '514 forms a peroxyacid of the ring opened lactone in a neutral to alkaline environment.

As set forth in the Spindler Declaration, in contrast to the bleaching solutions of Rees '514, the cleaning composition claimed in independent Claim 37 is based on a peroxide and an alkaline component which do not include a lactone, but rather clean and disinfect based on the release of oxygen by the peroxide.

Thus, Rees '514 fails to disclose cleaning compositions consisting essentially of a peroxide and an alkaline component, as called for in Claim 37, and one of ordinary skill in the art, in considering the overall teachings of Rees '514 with no knowledge of the presently claimed invention, would have no incentive or motivation to modify the bleaching solutions of Rees '514 to form a cleaning composition which does not include the lactone disclosed in Rees '514.

The sodium bicarbonate/peroxide aqueous solutions used for comparative purposes in Comparative Examples 1 and 2 (col. 7, line 65 through col. 8, line 2 and col. 8, lines 36-39) of Rees '514 are single phase aqueous solutions and therefore not a *method* of cleaning and disinfecting a surface or an item of equipment, including the steps of providing a cleaning kit in

including a first container consisting essentially of a peroxide, and a second container consisting essentially of an alkaline component; and applying the peroxide and the alkaline components of the first and second containers to at least one of the surface and the item of equipment to clean and disinfect the surface or item of equipment, as called for in Claim 37.

Thus, Appellant respectfully submits that independent Claims 37, as well as the claims which depend therefrom, are not anticipated by, nor obvious in view of, Rees '514.

3. Claims 37-51 and 53-56 are not anticipated by U.S. Patent No. 6,391,840 to Thompson et al.

The Examiner rejected Claims 37-51 and 53-56 as being anticipated by U.S. Patent No. 6,391,840 to Thompson et al. ("Thompson et al. '840").

As set forth in the Spindler Declaration, Thompson et al. '840 discloses bleaching compositions which may include two partial compositions, one of which containing an alkaline pH adjusting compound, and the other containing a peroxide and a bleach activator. Suitable peroxides, or "peroxygen bleach compounds", are set forth at col. 5, lines 39-67, and suitable bleach activator compounds, such as imines and oxaziridines, are set forth at col. 6, line 1 through col. 8, line 54.

Similar to Arbogast et al. '327, discussed above, Thompson et al. '840 fails to disclose a method of cleaning and disinfecting a surface or an item of equipment, including the steps of providing a cleaning kit including a first container consisting essentially of a peroxide and a second container consisting essentially of an alkaline component, and applying the peroxide and alkaline component of the first and second containers to at least one surface or the item of equipment to clean and disinfect the surface or item of equipment, as called for in independent Claim 37. In particular, the bleach activators of the bleaching compositions of Thompson et al. '840 are properly excluded by the translational phrase "consisting essentially of" in independent Claim 37.

Similar to Arbogast et al. '327, discussed above, the bleach activators in the bleaching compositions of Thompson et al. '840 react with the peroxide in alkaline conditions to form a peracid which is the actual bleaching species (*See* **Exhibits 2 and 1** of the Spindler Declaration).

As set forth in the Spindler Declaration, in contrast to the bleaching solutions of

Thompson et al. '840, the cleaning composition claimed in independent Claim 37 is based on a peroxide and an alkaline component which do not include a bleach activator to generate peracids, but rather clean and disinfect based on the release of oxygen by the peroxide.

Thus, Thompson et al. '840 fails to disclose cleaning compositions consisting essentially of a peroxide and an alkaline component, as called for in Claim 37, and one or ordinary skill in the art, in considering the overall teachings of Thompson et al. '840 with no knowledge of the presently claimed invention, would have no incentive or motivation to modify the bleaching solutions of Thompson et al. '840 to form a cleaning composition which does not include the bleach activators disclosed in Thompson et al. '840.

Thus, Appellant respectfully submits that independent Claim 37, as well as the claims which depend therefrom, are not anticipated by, nor obvious in view of, Thompson et al. '840.

4. Claims 52, 67, 78, and 80 are not obvious in view of Arbogast et al. '327.

The Examiner rejected Claims 52, 67, 78, and 80 under 35 U.S.C. §103(a) as being obvious in view Arbogast et al. '327. Appellant submits that, because independent Claims 37, 57, and 71 are not anticipated by, nor are obvious in view of, Arbogast et al. '327, Claims 52, 67, and 78 which depend therefrom, respectively, are not obvious in view of Arbogast et al. '327.

5. Claim 52 is not obvious in view of Thompson et al. '840.

The Examiner rejected Claim 52 as being obvious over Thompson et al. '840. Appellant submits that, because independent Claim 37 is not anticipated by, nor is obvious in view of, Thompson et al. '840, Claim 52, which depends therefrom, is also not obvious in view of Thompson et al. '840.

For the foregoing reasons, Appellant respectfully submits that the pending claims are patentable over the references applied by the Examiner, and respectfully requests that the grounds of rejection asserted by the Examiner be overturned.

Respectfully submitted,

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CERTIFICATION OF FILING

I hereby certify that this correspondence is being electronically filed, on: February 12, 2008

ADAM F. COX, REG. NO. 46,644
Name of Registered Representative

Signature

February 12, 2008
Date

VIII. CLAIMS APPENDIX

37. A method of cleaning and disinfecting a surface or an item of equipment, comprising the steps of:

providing a cleaning kit comprising:

a first container consisting essentially of a peroxide; and

a second container consisting essentially of an alkaline component; and

applying the peroxide and the alkaline components of the first and second containers to at least one of the surface and the item of equipment to clean and disinfect the surface or item of equipment.

38. The method of Claim 37, wherein the alkaline component includes at least one of carbonates, phosphates, silicates, borates and hydroxides.

39. The method of Claim 37, wherein the peroxide and the alkaline component are in liquid form.

40. The method of Claim 37, wherein said applying step further comprises mixing the peroxide and the alkaline component.

41. The method of Claim 37, wherein said applying step further comprises at least one of foaming the cleaning composition on the surface and foaming the cleaning composition onto or into the item of equipment.

42. The method of Claim 37, wherein the cleaning kit is formulated to be low foaming during said applying step.

43. The method of Claim 37, wherein the cleaning kit is formulated to be moderately foaming during said applying step.

44. The method of Claim 37, wherein the cleaning kit is formulated to be high

foaming during said applying step.

45. The method of Claim 37, wherein the peroxide is at a concentration of between approximately 0.1 to 70% by weight.

46. The method of Claim 37, wherein the peroxide has a pH of between approximately 4.5 to 7.

47. The method of Claim 37, wherein at least one of the first and second containers further includes a chemical additive selected from the group consisting of chelants, coupling agents, dyes, and surfactants.

48. The method of Claim 37, wherein at least one of the first and second containers further includes an oxygen-stable surfactant.

49. The method of Claim 48, wherein the oxygen-stable surfactant is an amine oxide.

50. The method of Claim 48, wherein the oxygen-stable surfactant is an anionic surfactant comprising at least one of a sulfate and a sulfonate of oils and fatty acids.

51. The method of Claim 48, wherein the oxygen-stable surfactant is a non-ionic ethoxylated alcohol.

52. The method of Claim 48, wherein the oxygen-stable surfactant is at least one of a diphenyl sulfonate and a diphenyl sulfonate derivative.

53. The method of Claim 37, wherein the alkaline component is at a concentration of between approximately 0.1 to 50% by weight.

54. The method of Claim 37, wherein the alkaline component is at a concentration of

between approximately 5 to 15% by weight.

55. The method of Claim 37, wherein the alkaline component has a pH of between approximately 10 to 13.

56. The method of Claim 37, wherein at least one of the first and second containers includes a surfactant, said surfactant comprising at least one part amine oxide to between 5 and 99 parts hydrogen peroxide on an active weight basis.

57. A method of cleaning and disinfecting a surface or an item of equipment, comprising the steps of:

providing a cleaning composition in dry form, the cleaning composition consisting essentially of a peroxide and an alkaline component; and

applying the cleaning composition in dry form to at least one of the surface and the item of equipment to clean and disinfect the surface or item of equipment.

58. The method of Claim 57, wherein the alkaline component includes at least one of carbonates, phosphates, silicates, borates and hydroxides.

59. The method of Claim 57, wherein said providing step further comprises providing the peroxide and the alkaline component in first and second containers, respectively, and said applying step further comprises mixing the peroxide and the alkaline component.

60. The method of Claim 57, wherein said providing step further comprises providing the peroxide and the alkaline component in a single container.

61. The method of Claim 57, wherein the peroxide has a pH of between approximately 7 to 14.

62. The method of Claim 57, wherein the cleaning composition includes a chemical additive selected from the group consisting of chelants, coupling agents, dyes, and surfactants.

63. The method of Claim 57, wherein the cleaning composition further includes an oxygen-stable surfactant.

64. The method of Claim 63, wherein the oxygen-stable surfactant is an amine oxide.

65. The method of Claim 63, wherein the oxygen-stable surfactant is an anionic surfactant comprising at least one of a sulfate and a sulfonate of oils and fatty acids.

66. The method of Claim 63, wherein the oxygen-stable surfactant is a non-ionic ethoxylated alcohol.

67. The method of Claim 63, wherein the oxygen-stable surfactant is at least one of a diphenyl sulfonate and a diphenyl sulfonate derivative.

68. The method of Claim 57, wherein the alkaline component is at a concentration of between approximately 0.1 to 50% by weight.

69. The method of Claim 57, wherein the alkaline component has a pH of between approximately 10 to 13.

70. The method of Claim 57, wherein the cleaning composition includes a surfactant, said surfactant comprising at least one part amine oxide to between 5 and 99 parts hydrogen peroxide on an active weight basis.

71. A method of cleaning and disinfecting a surface or an item of equipment, comprising the steps of:

providing a cleaning composition in dry form, the cleaning composition consisting essentially of a peroxide; and

applying the cleaning composition in dry form to at least one of the surface and the item of equipment to clean and disinfect the surface or item of equipment.

72. The method of Claim 71, wherein the cleaning composition has a pH of between approximately 7 to 14.

73. The method of Claim 71, wherein the cleaning composition includes a chemical additive selected from the group consisting of chelants, coupling agents, dyes, and surfactants.

74. The method of Claim 71, wherein the cleaning composition further includes an oxygen-stable surfactant.

75. The method of Claim 74, wherein the oxygen-stable surfactant is an amine oxide.

76. The method of Claim 74, wherein the oxygen-stable surfactant is an anionic surfactant comprising at least one of a sulfate and a sulfonate of oils and fatty acids.

77. The method of Claim 74, wherein the oxygen-stable surfactant is a non-ionic ethoxylated alcohol.

78. The method of Claim 74, wherein the oxygen-stable surfactant is at least one of a diphenyl sulfonate and a diphenyl sulfonate derivative.

79. The method of Claim 71, wherein the cleaning composition includes a surfactant, said surfactant comprising at least one part amine oxide to between 5 and 99 parts hydrogen peroxide on an active weight basis.

80. The method of Claim 37, wherein at least one of said first and second containers is a 55 gallon drum.

IX. EVIDENCE APPENDIX

1. Declaration of the inventor and Appellant in the present application, Mr. William E. Spindler, under 35 U.S.C. §1.132 ("the Spindler Declaration"), including **Exhibit 1** (a web page from *www.scienceinthebox.com*) and **Exhibit 2** (Lim, S-H et al., *Performance of a new cationic bleach activator on a hydrogen peroxide bleaching system*, (2004)).

(--Copy Attached--)

The Spindler Declaration with exhibits was entered by the Examiner at paragraph 17 of the final Office Action dated December 19, 2007, as part of Appellant's submission dated October 29, 2007.

X. RELATED PROCEEDINGS APPENDIX

[NONE]